Greanias et al.

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[54] CHINESE/KANJI ON-LINE RECOGNITION SYSTEM

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[57] ABSTRACT

A Chinese/Kanji on-line recognition system consisting of four main sections, these being tablet electronics, a signal filter and segment integration unit, a base stroke classification unit and a symbol element recognition unit, and a symbol recognition output table. The tablet electronics provides pen coordinate signals and pen up/down signals which are applied to the signal filter and segment integration unit to define segments of strokes which correspond to continuous motion of a pen on a tablet in a fixed direction. The base stroke classification unit classifies the motion of the pen between pen down and pen up occurrences into one of 42 categories and also indicates if the stroke has crossed a prior stroke. This is then analyzed by the symbol element recognition unit which interprets the base strokes that have been recorded for the word and generates a sequence of symbol elements, referred to as "alphabet" components, that occur in this symbol. The sequence of symbol elements are interpreted in the symbol recognition output table which provides a form of a simple table look-up to determine the word that had been written. Only 72 basic symbol elements (alphabet) are required to synthesize all of the Chinese/Kanji vocabu-

10 Claims, 23 Drawing Figures

